

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/336,091A
Source: IFW/6
Date Processed by STIC: 11/5/04

ENTERED



IFW16

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/336,091A

DATE: 11/05/2004

TIME: 12:04:46

Input Set : A:\L0461.70063US00seq.txt

Output Set: N:\CRF4\11052004\I336091A.raw

```

3 <110> APPLICANT: Van Snick, Jacques
4   Lethe, Bernard
5   Chaux, Pascal
6   Boon-Falleur, Thierry
7   van der Bruggen, Pierre
9 <120> TITLE OF INVENTION: MAGE-A1 PEPTIDES PRESENTED BY HLA CLASS
10  II MOLECULES
12 <130> FILE REFERENCE: L0461/7063
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/336,091A
C--> 14 <141> CURRENT FILING DATE: 1999-06-18
14 <160> NUMBER OF SEQ ID NOS: 73
16 <170> SOFTWARE: FastSEQ for Windows Version 3.0
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 1624
20 <212> TYPE: DNA
21 <213> ORGANISM: Homo sapiens
23 <400> SEQUENCE: 1
24  gttttcaggg gacaggccaa cccagaggac aggatccct ggaggccaca gaggagcacc      60
26  aaggagaaga tctgcctgtg ggtcttcatt gccagctcc tgcccacact cctgcctgct      120
28  gccctgacga gagtcatcat gtctcttgag cagaggagtc tgcactgcaa gcctgaggaa      180
30  gcccttgagg cccaacaaga ggccctgggc ctggtgtgtg tgcaggctgc cacctcctcc      240
32  tcctctcctc tggctcctggg caccctggag gaggtgccca ctgctgggtc aacagatcct      300
34  cccagagtc ctcagggagc ctccgccttt cccactacca tcaacttcac tcgacagagg      360
36  caaccagtg agggttccag cagccgtgaa gaggaggggc caagcacctc ttgtatcctg      420
38  gagtccctgt tccgagcagt aatcactaag aagggtggctg atttggttgg ttttctgctc      480
40  ctcaaatac gagccaggga gccagtcaca aaggcagaaa tgctggagag tgtcatcaaa      540
42  aattacaagc actgttttcc tgagatcttc ggcaaagcct ctgagtcctt gcagctggtc      600
44  tttggcattg acgtgaagga agcagacccc accggccact cctatgtcct tgtcacctgc      660
46  ctaggctctc cctatgatgg cctgctgggt gataatcaga tcatgcccaa gacaggcttc      720
48  ctgataattg tcctggtcac gattgcaatg gagggcggcc atgctcctga ggaggaaatc      780
50  tgggaggagc tgagtgtgat ggaggtgtat gatgggagg agcacagtgc ctatggggag      840
52  cccaggaagc tgctcaccca agatttggtg caggaaaagt acctggagta ccggcaggtg      900
54  ccggacagtg atcccgcacg ctatgagttc ctgtggggtc caagggccct cgctgaaacc      960
56  agctatgtga aagtccttga gtatgtgac aaggtcagtg caagagtctg ctttttcttc      1020
58  ccatccctgc gtgaagcagc tttgagagag gaggaagagg gagtctgagc atgagttgca      1080
60  gccaaaggca gtgggagggg gactgggcca gtgcacctc cagggcccgcg tccagcagct      1140
62  tccctgcct cgtgtgacat gaggccatt cttcactctg aagagagcgg tcagtgttct      1200
63  cagtagtagg tttctgttct attgggtgac ttggagattt atctttgttc tcttttgaa      1260
65  ttgttcaaat gttttttttt aagggtggtg tgaatgaact tcagcatcca agtttatgaa      1320
67  tgacagcagt cacacagttc tgtgtatata gttaagggg aagagtcttg tgttttattc      1380
69  agattgggaa atccattcta ttttgtgaat tgggataata acagcagtg aataagtact      1440
71  tagaaatgtg aaaaatgagc agtaaaatag atgagataaa gaactaaaga aattaagaga      1500
73  tagtcaattc ttgccttata cctcagtccta ttctgtaaaa tttttaaaga tatatgcata      1560

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/336,091A

DATE: 11/05/2004

TIME: 12:04:46

Input Set : A:\L0461.70063US00seq.txt

Output Set: N:\CRF4\11052004\I336091A.raw

```

75 cctggatttc cttggcttct ttgagaatgt aagagaaatt aaatctgaat aaagaattct 1620
77 tcct 1624
79 <210> SEQ ID NO: 2
80 <211> LENGTH: 309
81 <212> TYPE: PRT
82 <213> ORGANISM: Homo sapiens
84 <400> SEQUENCE: 2
85 Met Ser Leu Glu Gln Arg Ser Leu His Cys Lys Pro Glu Glu Ala Leu
86 1 5 10 15
87 Glu Ala Gln Gln Glu Ala Leu Gly Leu Val Cys Val Gln Ala Ala Thr
88 20 25 30
89 Ser Ser Ser Ser Pro Leu Val Leu Gly Thr Leu Glu Glu Val Pro Thr
90 35 40 45
91 Ala Gly Ser Thr Asp Pro Pro Gln Ser Pro Gln Gly Ala Ser Ala Phe
92 50 55 60
93 Pro Thr Thr Ile Asn Phe Thr Arg Gln Arg Gln Pro Ser Glu Gly Ser
94 65 70 75 80
95 Ser Ser Arg Glu Glu Gly Pro Ser Thr Ser Cys Ile Leu Glu Ser
96 85 90 95
97 Leu Phe Arg Ala Val Ile Thr Lys Lys Val Ala Asp Leu Val Gly Phe
98 100 105 110
99 Leu Leu Leu Lys Tyr Arg Ala Arg Glu Pro Val Thr Lys Ala Glu Met
100 115 120 125
101 Leu Glu Ser Val Ile Lys Asn Tyr Lys His Cys Phe Pro Glu Ile Phe
102 130 135 140
103 Gly Lys Ala Ser Glu Ser Leu Gln Leu Val Phe Gly Ile Asp Val Lys
104 145 150 155 160
105 Glu Ala Asp Pro Thr Gly His Ser Tyr Val Leu Val Thr Cys Leu Gly
106 165 170 175
107 Leu Ser Tyr Asp Gly Leu Leu Gly Asp Asn Gln Ile Met Pro Lys Thr
108 180 185 190
109 Gly Phe Leu Ile Ile Val Leu Val Met Ile Ala Met Glu Gly Gly His
110 195 200 205
111 Ala Pro Glu Glu Glu Ile Trp Glu Glu Leu Ser Val Met Glu Val Tyr
112 210 215 220
113 Asp Gly Arg Glu His Ser Ala Tyr Gly Glu Pro Arg Lys Leu Leu Thr
114 225 230 235 240
115 Gln Asp Leu Val Gln Glu Lys Tyr Leu Glu Tyr Arg Gln Val Pro Asp
116 245 250 255
117 Ser Asp Pro Ala Arg Tyr Glu Phe Leu Trp Gly Pro Arg Ala Leu Ala
118 260 265 270
119 Glu Thr Ser Tyr Val Lys Val Leu Glu Tyr Val Ile Lys Val Ser Ala
120 275 280 285
121 Arg Val Arg Phe Phe Phe Pro Ser Leu Arg Glu Ala Ala Leu Arg Glu
122 290 295 300
123 Glu Glu Glu Gly Val
124 305
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 16

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/336,091A

DATE: 11/05/2004

TIME: 12:04:46

Input Set : A:\L0461.70063US00seq.txt

Output Set: N:\CRF4\11052004\I336091A.raw

```

127 <212> TYPE: PRT
128 <213> ORGANISM: Homo sapiens
130 <400> SEQUENCE: 3
131 Val Lys Val Leu Glu Tyr Val Ile Lys Val Ser Ala Arg Val Arg Phe
132 1 5 10 15
134 <210> SEQ ID NO: 4
135 <211> LENGTH: 16
136 <212> TYPE: PRT
137 <213> ORGANISM: Homo sapiens
139 <400> SEQUENCE: 4
140 Glu Tyr Val Ile Lys Val Ser Ala Arg Val Arg Phe Phe Phe Pro Ser
141 1 5 10 15
143 <210> SEQ ID NO: 5
144 <211> LENGTH: 12
145 <212> TYPE: PRT
146 <213> ORGANISM: Homo sapiens
148 <400> SEQUENCE: 5
149 Glu Thr Ser Tyr Val Lys Val Leu Glu Tyr Val Ile
150 1 5 10
152 <210> SEQ ID NO: 6
153 <211> LENGTH: 12
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 6
158 Val Lys Val Leu Glu Tyr Val Ile Lys Val Ser Ala
159 1 5 10
161 <210> SEQ ID NO: 7
162 <211> LENGTH: 12
163 <212> TYPE: PRT
164 <213> ORGANISM: Homo sapiens
166 <400> SEQUENCE: 7
167 Glu Tyr Val Ile Lys Val Ser Ala Arg Val Arg Phe
168 1 5 10
170 <210> SEQ ID NO: 8
171 <211> LENGTH: 12
172 <212> TYPE: PRT
173 <213> ORGANISM: Homo sapiens
175 <400> SEQUENCE: 8
176 Lys Val Ser Ala Arg Val Arg Phe Phe Phe Pro Ser
177 1 5 10
179 <210> SEQ ID NO: 9
180 <211> LENGTH: 12
181 <212> TYPE: PRT
182 <213> ORGANISM: Homo sapiens
184 <400> SEQUENCE: 9
185 Arg Val Arg Phe Phe Phe Pro Ser Leu Arg Glu Ala
186 1 5 10
187 <210> SEQ ID NO: 10
188 <211> LENGTH: 12

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/336,091A

DATE: 11/05/2004

TIME: 12:04:46

Input Set : A:\L0461.70063US00seq.txt

Output Set: N:\CRF4\11052004\I336091A.raw

```

189 <212> TYPE: PRT
190 <213> ORGANISM: Homo sapiens
192 <400> SEQUENCE: 10
193 Phe Phe Pro Ser Leu Arg Glu Ala Ala Leu Arg Glu
194 1 5 10
196 <210> SEQ ID NO: 11
197 <211> LENGTH: 13
198 <212> TYPE: PRT
199 <213> ORGANISM: Homo sapiens
201 <400> SEQUENCE: 11
202 Leu Arg Glu Ala Ala Leu Arg Glu Glu Glu Gly Val
203 1 5 10
205 <210> SEQ ID NO: 12
206 <211> LENGTH: 36
207 <212> TYPE: DNA
208 <213> ORGANISM: Homo sapiens
210 <400> SEQUENCE: 12
211 gagtatgtga tcaagggtcag tgcaagagtt cgcttt 36
213 <210> SEQ ID NO: 13
214 <211> LENGTH: 16
215 <212> TYPE: PRT
216 <213> ORGANISM: Homo sapiens
218 <400> SEQUENCE: 13
219 Tyr Val Lys Val Leu Glu His Val Val Arg Val Asn Ala Arg Val Arg
220 1 5 10 15
222 <210> SEQ ID NO: 14
223 <211> LENGTH: 16
224 <212> TYPE: PRT
225 <213> ORGANISM: Homo sapiens
W--> 226 <400> SEQUENCE: 14
227 Leu Glu His Val Val Arg Val Asn Ala Arg Val Arg Ile Ala Tyr Pro
228 1 5 10 15
230 <210> SEQ ID NO: 15
231 <211> LENGTH: 9
232 <212> TYPE: PRT
233 <213> ORGANISM: Homo sapiens
235 <400> SEQUENCE: 15
236 Glu Ala Asp Pro Thr Gly His Ser Tyr
237 1 5
239 <210> SEQ ID NO: 16
240 <211> LENGTH: 9
241 <212> TYPE: PRT
242 <213> ORGANISM: Homo sapiens
244 <400> SEQUENCE: 16
245 Ser Leu Phe Arg Ala Val Ile Thr Lys
246 1 5
249 <210> SEQ ID NO: 17
250 <211> LENGTH: 9
251 <212> TYPE: PRT

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/336,091A

DATE: 11/05/2004

TIME: 12:04:46

Input Set : A:\L0461.70063US00seq.txt

Output Set: N:\CRF4\11052004\I336091A.raw

252 <213> ORGANISM: Homo sapiens
 254 <400> SEQUENCE: 17
 255 Asn Tyr Lys His Cys Phe Pro Glu Ile
 256 1 5
 258 <210> SEQ ID NO: 18
 259 <211> LENGTH: 10
 260 <212> TYPE: PRT
 261 <213> ORGANISM: Homo sapiens
 263 <400> SEQUENCE: 18
 264 Glu Val Tyr Asp Gly Arg Glu His Ser Ala
 265 1 5 10
 267 <210> SEQ ID NO: 19
 268 <211> LENGTH: 10
 269 <212> TYPE: PRT
 270 <213> ORGANISM: Homo sapiens
 272 <400> SEQUENCE: 19
 273 Arg Glu Pro Val Thr Lys Ala Glu Met Leu
 274 1 5 10
 276 <210> SEQ ID NO: 20
 277 <211> LENGTH: 9
 278 <212> TYPE: PRT
 279 <213> ORGANISM: Homo sapiens
 281 <400> SEQUENCE: 20
 282 Asp Pro Ala Arg Tyr Glu Phe Leu Trp
 283 1 5
 284 <210> SEQ ID NO: 21
 285 <211> LENGTH: 9
 286 <212> TYPE: PRT
 287 <213> ORGANISM: Homo sapiens
 289 <400> SEQUENCE: 21
 290 Ser Ala Phe Pro Thr Thr Ile Asn Phe
 291 1 5
 293 <210> SEQ ID NO: 22
 294 <211> LENGTH: 9
 295 <212> TYPE: PRT
 296 <213> ORGANISM: Homo sapiens
 298 <400> SEQUENCE: 22
 299 Ser Ala Tyr Gly Glu Pro Arg Lys Leu
 300 1 5
 302 <210> SEQ ID NO: 23
 303 <211> LENGTH: 14
 304 <212> TYPE: PRT
 305 <213> ORGANISM: Homo sapiens
 307 <400> SEQUENCE: 23
 308 Leu Leu Lys Tyr Arg Ala Arg Glu Pro Val Thr Lys Ala Glu
 309 1 5 10
 311 <210> SEQ ID NO: 24
 312 <211> LENGTH: 10
 313 <212> TYPE: PRT

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/336,091A

DATE: 11/05/2004

TIME: 12:04:47

Input Set : A:\L0461.70063US00seq.txt

Output Set: N:\CRF4\11052004\I336091A.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:226 M:283 W: Missing Blank Line separator, <400> field identifier
L:559 M:283 W: Missing Blank Line separator, <400> field identifier